
Instructions for:
The Model Twelve
Transportable
Component
Music System
by Henry Kloss

Contents

Safety Precautions	i, ii
Introduction	1
Unpacking And Checking For Shipping Damage	2
Connections	3
Controls	5
Speaker Placement	6
Difficulty	7
1-Year Limited Warranty	8

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within a product's enclosure that may be of sufficient magnitude to constitute the risk of electric shock to persons.

WARNING

SHOCK HAZARD
DO NOT OPEN

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE AMPLIFIER'S COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

AVIS

RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR

POUR EVITER TOUT RISQUE DE CHOC ELECTRIQUE, NE PAS DEMONTER LE COUVERCLE DU HAUT PARLEUR. AUCUN ENTRETIEN DES PIECES INTERIEURES N'EST REQUIS. TOUT SERVICE D'ENTRETIEN NE DOIT ETRE EFFECTUE QUE PAR DU PERSONNEL D'ENTRETIEN QUALIFIE.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

**READ AND HEED IMPORTANT SAFETY WARNING
ON BOTTOM OF SUBWOOFER ENCLOSURE**

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.



WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

The serial number for the subwoofer is located on the amplifier. Please write this number down and keep it in a secure area. This is for your security.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS - All safety and operating instructions should be read before the *Model Twelve* is operated.

RETAIN INSTRUCTIONS - The safety and operating instructions should be retained for future reference.

HEED WARNINGS - All warnings on the amplifier and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS - All operating and user instructions should be followed.

CLEANING - Unplug the power supply adapter from the wall outlet or other power source before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

ATTACHMENTS - Do not use attachments not recommended by Cambridge SoundWorks as they may cause hazards.

WATER AND MOISTURE - Do not use the *Model Twelve* near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES - Do not place any part of the *Model Twelve* on an unstable cart, stand, tripod, bracket, or table. It may fall, causing serious injury to a child or adult, and serious damage to the product. Position the parts of the *Model Twelve* according to the instructions.

VENTILATION - Slots and openings in the *Model Twelve* amplifier are provided for ventilation, to ensure reliable operation of the amplifier and to prevent it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. The *Model Twelve* should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided.

HEAT - All parts of the *Model Twelve* should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

POWER SOURCES - The *Model Twelve* should be operated only from the type of power source indicated on the power supply label. If you are not sure of the type of power source to your home, consult your product dealer or local power company.

POLARIZATION - The power supply adapter may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

POWER-CORD PROTECTION - AC power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the power supply adapter.

LIGHTNING - For added protection for the *Model Twelve* system during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the subwoofer due to lightning and power-line surges.

OVERLOADING - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY - Never push objects of any kind into the *Model Twelve* through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the subwoofer.

SERVICING - Do not attempt to service the *Model Twelve* yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE - Unplug the power supply adapter of the *Model Twelve* from the wall outlet or other power source and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the subwoofer.
- c) If the *Model Twelve* has been exposed to rain or water.
- d) If the *Model Twelve* does not operate normally by following the operating instructions; or exhibits a distinct change in performance.
- e) If the *Model Twelve* has been dropped or damaged in any way.

REPLACEMENT PARTS - When replacement parts are required, be sure the service technician has used replacement parts specified by Cambridge SoundWorks or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK - Upon completion of any service or repairs to the *Model Twelve*, ask the service technician to perform safety checks to determine that the *Model Twelve* is in proper operating condition.



Introduction

Thank you for choosing the *Model Twelve* Transportable Component Music System. In most respects, you will find that *Model Twelve* operates much like any other component stereo system and is easier to set up. If the satellite speaker concept is new to you, please pay particular attention to the instructions on "Speaker Placement" (page 6). Like all component music systems, *Model Twelve's* sound is greatly influenced by where its speaker units are placed in the listening room. *Model Twelve's* two small satellite speakers and separate *BassCase*® low-

frequency unit provide far greater placement flexibility than conventional speakers. Place them casually, and chances are *Model Twelve* will sound good. But take the time to experiment with speaker placement and *Model Twelve* can sound astonishing—as good or better than far larger and more elaborate systems. Speaker placement can make *that much difference*.

If you have any questions, don't hesitate to contact the store where you purchased *Model Twelve*, or call a Cambridge SoundWorks Audio/Video Consultant directly, toll-free.

Cambridge SoundWorks
1-877-YES-HIFI
(1-877-937-4434)
24 hours a day,
every day
In Canada: 1-800-987-9104
Outside US or Canada:
Tel: 617-332-5936
Fax: 617-527-3194
www.cambridgesoundworks.com
E-mail:
info@cambridgesoundworks.com

Unpacking And Checking For Shipping Damage

1. If you suspect that your *Model Twelve* has been damaged in shipping, do not connect and use the unit. Call us right away for advice, and be sure not to discard any packing materials in case the unit has to be returned.
2. To open *Model Twelve*, place it on a flat surface with its round bass speaker grille facing downwards. Press down firmly on a corner of the case near either latch and flip up the latch; repeat for the other latch. Open the lid.
3. As you remove *Model Twelve's* individual components, note how the various parts are stored. You will need to repack the parts in the same places before transporting. Each satellite's speaker wire is pre-connected to push-and-release and wound around a plastic reel attached to the back. The reels may be removed by turning the large knurled knobs (that hold them in place) counterclockwise. However, leave the wires themselves attached to the connectors at

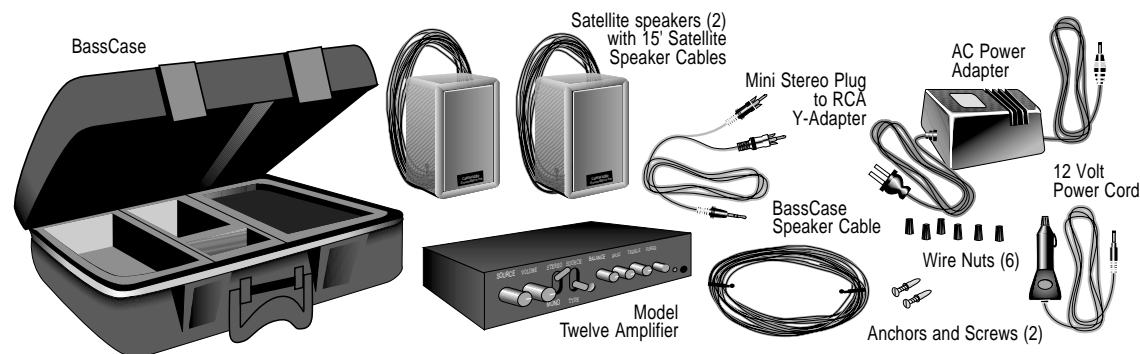
all times. This facilitates packing the system for carrying and setting it up at a new location. If you ever do disconnect the wires, be sure to connect the leads with the white stripe to the red "+" speaker terminals and the unmarked leads to the black "-" terminals.

4. In the case's center compartments you'll also find:
 - An unattached speaker wire for connecting the amplifier to the *BassCase*.
 - An AC power adapter.

- A 12-volt power cord for powering *Model Twelve* from a vehicle's cigarette lighter socket.
- A short audio cable for connecting a CD or cassette player to the amplifier.
- Anchors and screws for wall-mounting the satellites.
- Wire nuts for extending the speaker wires.
- An all-voltage, international power supply is available separately (P/N P89-0231). Contact a Cambridge Sound-Works Audio/Video Consultant at 1-877-YES-HIFI to purchase one.

The center compartments may also be used to store a portable CD or tape player, additional cables, etc.

5. Save the shipping carton and its inserts in case you ever have to ship your *Model Twelve*. The *BassCase* has been designed to withstand the rigors of being hand-carried, stored under an airline seat or riding in the trunk of a car, but *Model Twelve* should be packed in its carton before shipping by common carrier.



Connections

1. **Power connection.** *Model Twelve's* amplifier operates from a 12-14 volt DC source. A plug-in adapter for use with 120 V, 60 Hz AC household current is supplied. Also, a connecting cable for powering the amplifier from a vehicle's 12 VDC, negative ground electrical system, is supplied (See diagram at right). *To prevent damage to the amplifier, do not connect Model Twelve to any other power source without first calling Cambridge SoundWorks for advice (1-877-YES-HIFI).*

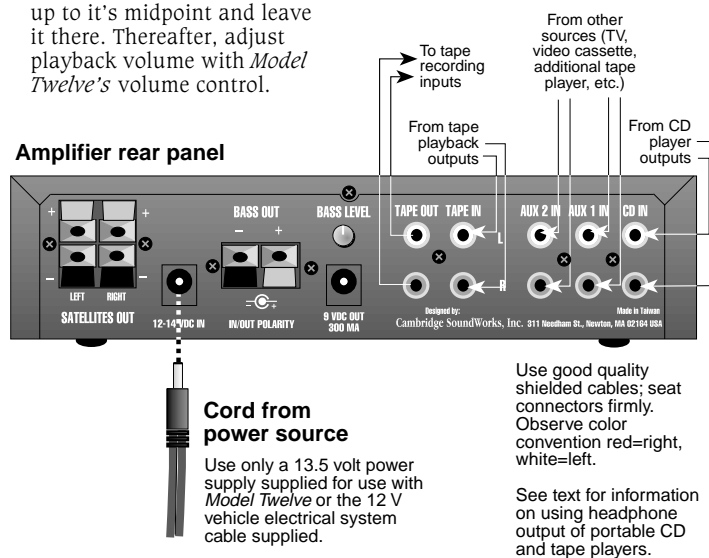
Note: When switched off, *Model Twelve's* amplifier reverts to a standby mode that uses a very small current. With a battery power source such as a vehicle's electrical system, unplug *Model Twelve* when not in use to prolong battery life.

2. **Connecting program sources.** *Model Twelve* accepts as many as four different program sources, as shown in the diagram below. Use line-level outputs wherever possible. If you have a portable CD or tape player that has only a headphone output, connect it to the amplifier, then turn its volume control up to its midpoint and leave it there. Thereafter, adjust playback volume with *Model Twelve's* volume control.

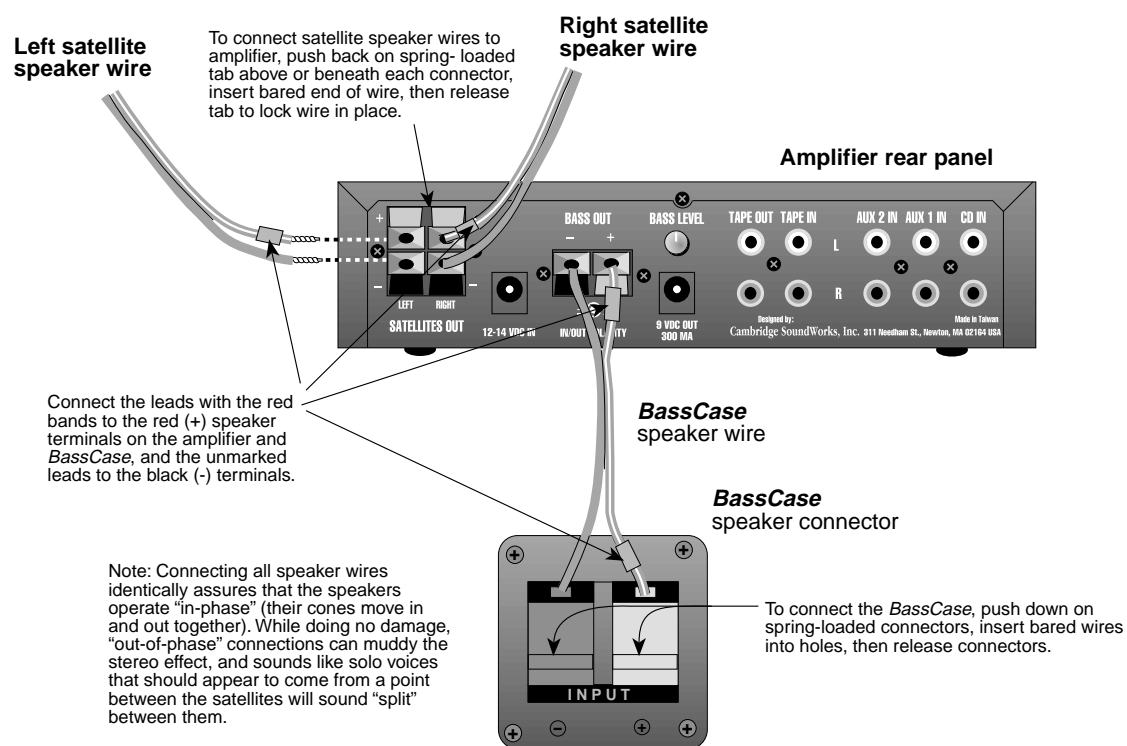
3. **Connecting the satellites.** Connect the unattached ends of the satellite speaker wires to the Satellites Out terminals on the amplifier. Attach the leads with the red tabs to the "+" terminals and the unmarked lead to the "-" terminals. For permanent

installation, the speaker wires may be extended using the wire nuts provided. Contact Cambridge SoundWorks or the store where you purchased the system for advice and appropriate wire. The satellites may also be wall-mounted as described in the section "Speaker Placement" on page 6.

4. **Connecting the *BassCase*.** Set the *BassCase* on a flat surface with the round bass speaker grille facing down. Press down on a corner near either latch and secure the latch: Repeat for the other latch.



As shown in the diagram at right, connect one end of the unattached speaker wire to the speaker terminals on the side of the *BassCase* and the other to the amplifier's Bass Out terminals. Attach the leads with the red tabs to the "+" terminals and the unmarked lead to the "-" terminals.



Controls

1. Front panel controls.

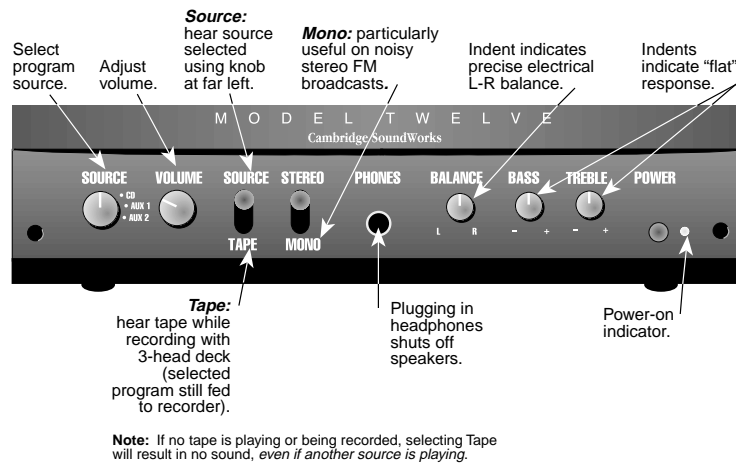
The front panel controls (shown below) operate like a typical stereo system. The Bass and Treble controls operate only at the frequency extremes to prevent mid-range coloration.

2. Rear panel BASS LEVEL control.

The Bass Level Control allows for adjustment of the subwoofer's overall output to compensate for shortcomings in room acoustics and/or *BassCase* placement. If, for example, the

bass is exaggerated and “boomy”, (as may happen when the *BassCase* has to go in a corner), turning down the control may clean things up. Conversely, if the *BassCase* has to be placed away from any room surfaces, turning up the control will provide a fuller sound.

The Bass Level Control's function is intimately tied to speaker placement, so be sure to consult the next section, “Speaker Placement”, as you investigate its effect. Leave the control set where it provides the bass balance you like; unlike the front panel tone controls, it is not intended to be adjusted regularly to compensate for differences in recordings.



Speaker Placement

To take full advantage of *Model Twelve's* unique design, experiment with speaker placement.

Satellites

1. Good stereo sound places the performers on a sound "stage" across from the listening area. With *Model Twelve*, that stage is best set by placing the satellites to form an approximately equal-sided triangle with the listening position at the apex. Because the room's surfaces tend to integrate the sound before it reaches the listening area, perfectly symmetrical placement is not necessary.
2. A clear line of sight from your listening position to the satellites ensures that higher frequencies are not blocked.
3. If the satellites are across the room from the listening area, their height is usually not critical; they can be placed down on the floor, up near the ceiling, or most anywhere in between. If they are close to the listening area, however, it is best to have them at or near ear level.
4. If the satellites are out from the wall and sound too "thin", particularly on vocal recordings, try moving them back against the wall. Conversely, if they are against the wall and sound too "heavy", particularly on male voices, try them out from the wall.
5. If you put the satellites in bookshelves or an in-wall system, place them with their front surfaces flush with the front of the shelves. Other locations to consider are on window sills or a mantelpiece (preferably at its extreme ends).
6. The satellites can also be wall-mounted using the keyhole slots on the plastic wire reels. For a more permanent installation, there are keyhole slots provided on the rear of the speakers themselves. The back panels of the satellites also provide threaded tripod-type mounts for use with speaker stands.

To hang the satellites on a wall, simply screw the supplied screws into the wall so that their heads protrude about $\frac{3}{8}$ in. to fit into the keyhole slots. The plastic anchors supplied may be needed to secure the screws in particularly hard or soft material. If so, drill $\frac{1}{4}$ inch holes in the wall, and tap the anchors into the holes until they are flush with the wall. Then screw the screws into the anchors until they protrude $\frac{3}{8}$ inch.

The BassCase

1. To start with, simply place the *BassCase* on the floor against the wall nearest the satellites. After some preliminary listening you can experiment further using the guidelines which follow.
2. The relative strength of low-bass depends on how close the *BassCase* is to intersecting room surfaces. The least bass results with the unit out in the room away from the

corners, walls, and ceiling. The most bass results in a corner on the floor or up near the ceiling. You can use the bass level control, as described in the previous section, to help compensate for acoustical placement deficiencies.

3. While we don't usually recommend placing the *BassCase* behind the listening area, you might try it if you're very tight for space.
4. Don't place the *BassCase* on the same shelf as a turntable. Strong bass notes from the speaker could, at least, muddy the bass, and at worst set up a loud, low-frequency rumbling.

Difficulty

If you suspect that there's a problem with your *Model Twelve*, contact the store where it was purchased, or call a Cambridge SoundWorks Audio/Video Consultant, who will help you track down the problem. If together you agree that there is something wrong with your *Model Twelve*, the Consultant will authorize its return to the Cambridge SoundWorks factory for service or replacement, and supply you with a Return Authorization Number. Please do not return *Model Twelve* or any of its components to the factory without prior authorization, as without a Return Authorization Number, unnecessary delays may result.

1-Year Limited Warranty

Model Twelve is covered by a unique, one-year warranty. If a problem resulting from a manufacturing defect occurs within the first year, Cambridge SoundWorks will repair the defect at no cost to the consumer. If a problem resulting from a manufacturing defect occurs in years two through five, Cambridge SoundWorks will repair the problem at a cost that shall not exceed \$50. This warranty does not apply to shipping costs, cosmetic repairs or to problems caused by user abuse.

The *Model Twelve* warranty does not extend to any defect, malfunction or failure caused by misuse, abuse, accident, faulty hook-up, defective associated equipment or use of the speaker with equipment for which it is not intended.

This warranty is valid only when the speaker is returned to a Cambridge SoundWorks retail

store, or directly to the address below, freight prepaid, together with a copy of the original sales slip to establish warranty status. If you have any questions, please contact Cambridge SoundWorks.

This is the sole and express warranty. This warranty is in lieu of all other warranties, expressed or implied, of merchantability, fitness for purpose or otherwise. In no event shall Cambridge SoundWorks be liable for incidental or consequential damages or have any liability with respect to defects other than the obligations set forth here.

For warranty information contact:

Cambridge SoundWorks, Inc.

311 Needham St.

Newton, MA 02464

1-877-YES-HIFI

(1-877-937-4434)

www.cambridgesoundworks.com

email:

info@cambridgesoundworks.com

C A M B R I D G E
SOUNDWORKS

311 Needham Street, Newton MA 02464
1-877-937-4434 Fax: 617-527-3194

www.cambridgesoundworks.com
Email: info@cambridgesoundworks.com

P81-1400 0400

A **CREATIVE** Company
